

Appln. No. 10/607,143
Amendment

AMENDMENTS TO THE CLAIMS

Listing of claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Claim 1 (currently amended): A system for processing wastewater onboard a marine vessel, comprising: treatment means for receiving, holding, and treating the wastewater into a clean effluent and a sludge concentrate; plumbing means connected to the treatment means for discharging said clean effluent overboard and discharging said sludge concentrate either overboard, into an onboard holding tank or to undergo further onboard treatment, wherein said further onboard treatment includes concentration or destruction; and selective control means operatively connected to said treatment means and said plumbing means for establishing different operational modes involving said treating of the wastewater, said discharging of the clean effluent separately from said discharging of the sludge concentrate overboard based on location of the marine vessel and operating conditions of the system, said system further comprising: wastewater feed connecting means for enabling collection and temporary holding of the wastewater; ultraviolet disinfection means for reducing concentration of fecal coliform bacteria in the wastewater; bioreactor means for reception and holding of the wastewater a sufficient period of time during which naturally present bacteria consumes organic matter to allow filtration, said bioreactor means including a tank having membrane modules and diffusers therein, and aeration means for scouring surfaces of the membrane modules and sustains bacterial population within the tank; and, vent means connected to the bioreactor means for exiting of air and foam from the

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tank; and means for collection of the foam from the tank and feedback thereof to the bioreactor means.

Claim 2 (canceled)

Claim 3 (canceled)

Claim 4 (canceled)

Claim 5 (canceled)

Claim 6 (canceled)

Claim 7 (currently amended): The system as defined in claim [4] 1, including bioreactor means having a tank within which membrane modules are disposed and associated piping for filtering conditioned wastewater to emit a permeate stream meeting effluent quality thresholds.

Claim 8 (original): The system as defined in claim 7, wherein the bioreactor means includes plumbing means connected to the tank for transfer thereto of sludge concentrate and temporarily holding, further concentrating or destroying by thermal means, or discharging overboard therefrom the sludge concentrate.